

Illumination device with at least one LED as the light source

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US 6657379 (B2)
US 2003030368 (A1)
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Abstract of EP1278250

Illuminating unit comprises an LED as a light source emitting primary radiation in the region of 300-485 nm. The radiation is converted partially or completely into longer wavelength radiation using a luminescent material emitting yellow-orange with a wavelength of the peak emission at 540-620 nm and originating from Eu-activated Sialon of formula $M_p/2Si_{12-p}Al_pO_qN_{16-q}$; Eu^{2+} (where M = Ca or Ca in combination with Sr or Mg; q = 0-2.5; and p = 0.5-3). Preferred Features: The Al can be partially (up to 20 mol.%) replaced by Ga. The average grain diameter of the luminescent powder is 0.5-5 μm . The primary radiation is a chlorosilicate or a Y- or Tb-based garnet.

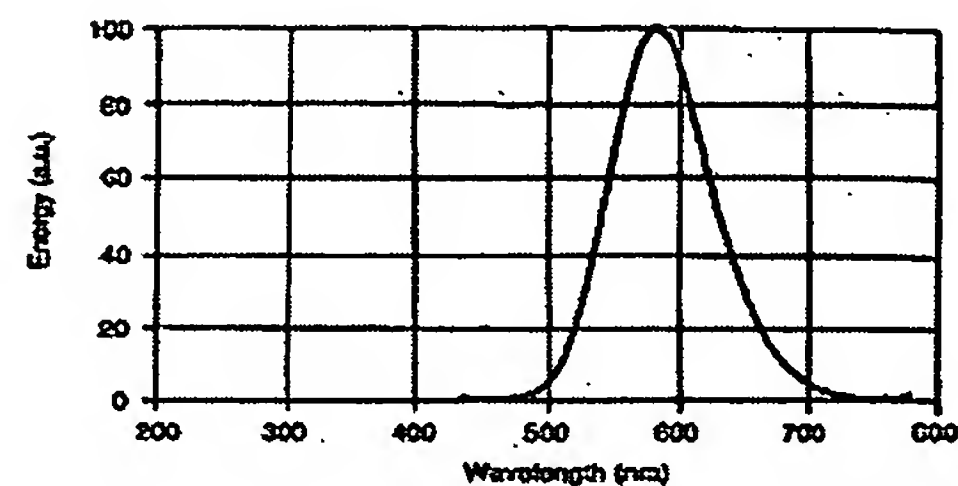


FIG. 3a

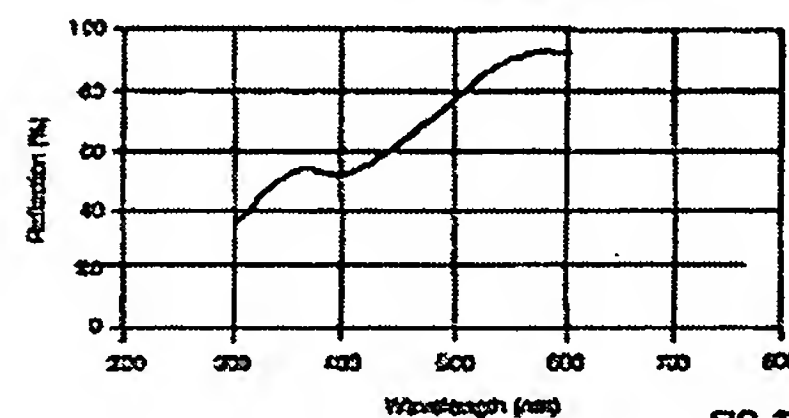


FIG. 3b

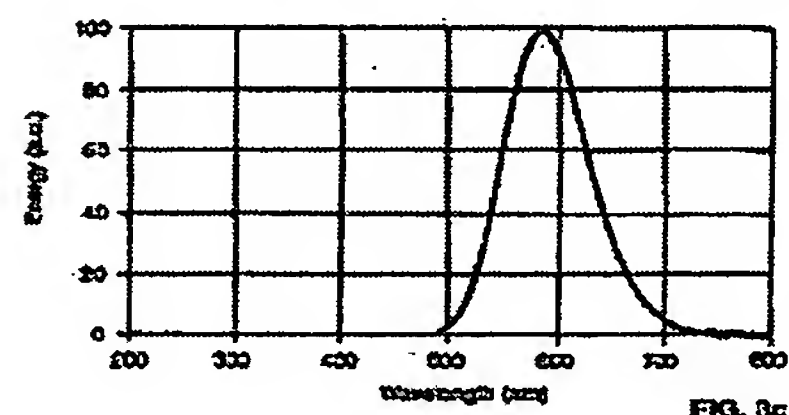


FIG. 3c

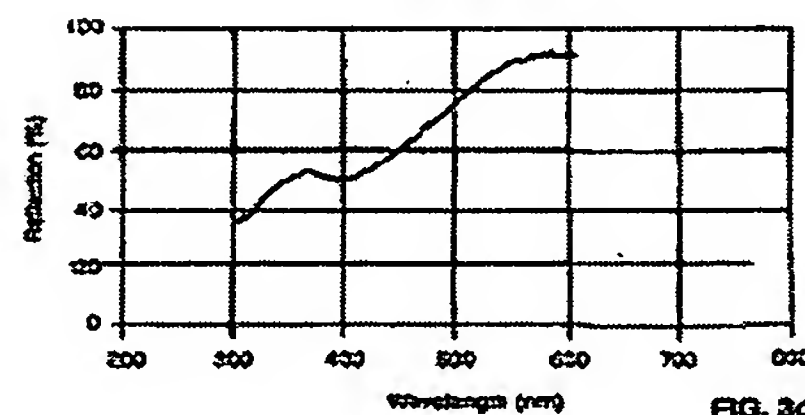


FIG. 3d

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